CLAIMS

1. (Currently Amended) A semiconductor device comprising:

a first input terminal receiving a first positive voltage externally in an inspection of said semiconductor device and a normal operation of said semiconductor device;

an internal circuit connected to said first input terminal and performing a prescribed operation; at least a portion of said internal circuit is formed with a thin film transistor; and

a first protection circuit protecting said internal circuit from static electricity generated at said first input terminal,

said first protection circuit including

a plurality of first diode elements connected in series between said first input terminal and a line of a reference potential and conducting in response to a voltage of said first input terminal exceeding a second positive voltage higher than said first positive voltage, and

a second diode element connected between the line of said reference potential and said first input terminal and conducting in response to the voltage of said first input terminal going lower than a first negative voltage; wherein

each of said plurality of first diode elements and said second diode element is formed with a thin film transistor having its gate and drain connected together.

2. (Currently Amended) The semiconductor device according to claim 1, further comprising:

a second input terminal connected to said internal circuit and receiving a ~~first~~ second negative voltage externally in the inspection of said semiconductor device and the normal operation of said semiconductor device; and

a second protection circuit protecting said internal circuit from static electricity generated at said second input terminal; wherein

said second protection circuit includes

a plurality of third diode elements connected in series between the line of said reference potential and said second input terminal and conducting in response to a voltage of said second input terminal going lower than a ~~second~~ third negative voltage lower than said ~~first~~ second negative voltage, and

a fourth diode element connected between said second input terminal and the line of said reference potential and conducting in response to the voltage of said second input terminal exceeding a third positive voltage; and

each of said plurality of third diode elements and said fourth diode element is formed with a thin film transistor having its gate and drain connected together.

3. (Currently Amended) The semiconductor device according to claim 2, further comprising:

a third input terminal connected to said internal circuit and receiving externally a voltage of at most a ~~third~~ fourth positive voltage and at least a ~~third~~ fourth negative voltage in the inspection of said semiconductor device and the normal operation of said semiconductor device; and

a third protection circuit protecting said internal circuit from static electricity generated at said third input terminal; wherein

said third protection circuit includes

a plurality of fifth diode elements connected in series between said third input terminal and the line of said reference potential and conducting in response to the voltage of said first input terminal exceeding a ~~fourth~~ fifth positive voltage higher than said ~~third~~ fourth positive voltage, and

a plurality of sixth diode elements connected in series between the line of said reference potential and said third input terminal and conducting in response to a voltage of said third input terminal going lower than a ~~fourth~~ fifth negative voltage lower than said ~~third~~ fourth negative voltage; and

each of said plurality of fifth diode elements and said plurality of sixth diode elements is formed with a thin film transistor having its gate and drain connected together.

4. (Currently Amended) A semiconductor device comprising:

an input terminal receiving a first negative voltage externally in an inspection of said semiconductor device and a normal operation of said semiconductor device;

an internal circuit connected to said input terminal and performing a prescribed operation, at least a portion of said internal circuit is formed with a thin film transistor; and

a protection circuit protecting said internal circuit from static electricity generated at said input terminal,

said protection circuit including

a plurality of first diode elements connected in series between a line of a reference potential and said input terminal and conducting in response to a voltage of said input terminal going lower than a second negative voltage lower than said first negative voltage, and

a second diode element connected between said input terminal and the line of said reference potential and conducting in response to the voltage of said input terminal exceeding a predetermined positive voltage; wherein

each of said plurality of first diode elements and said second diode element is formed with a thin film transistor having its gate and drain connected together.

5. (Currently Amended) A semiconductor device comprising:

an input terminal receiving externally a voltage of at most a first positive voltage and at least a first negative voltage in an inspection of said semiconductor device and a normal operation of said semiconductor device;

an internal circuit connected to said input terminal and performing a prescribed operation, at least a portion of said internal circuit is formed with a thin film transistor; and

a protection circuit protecting said internal circuit from static electricity generated at said input terminal,

said protection circuit including

a plurality of first diode elements connected in series between said input terminal and a line of a reference potential and conducting in response to a voltage of said input terminal exceeding a second positive voltage higher than said first positive voltage, and

a plurality of second diode elements connected in series between the line of said reference potential and said input terminal and conducting in response to the voltage of said input terminal going lower than a second negative voltage lower than said first negative voltage; wherein

each of said plurality of first diode elements and said plurality of second diode elements is formed with a thin film transistor having its gate and drain connected together.

6. (New) A semiconductor device comprising:

a first input terminal receiving a first positive voltage externally in an inspection of said semiconductor device and a normal operation of said semiconductor device;

an internal circuit connected to said first input terminal and performing a prescribed operation;

a first protection circuit protecting said internal circuit from static electricity generated at said first input terminal,

said first protection circuit including

a plurality of first diode elements connected in series between said first input terminal and a line of a reference potential and conducting in response to a voltage of said first input terminal exceeding a second positive voltage higher than said first positive voltage, and

a second diode element connected between the line of said reference potential and said first input terminal and conducting in response to the voltage of said first input terminal going lower than a first negative voltage;

a second input terminal connected said internal circuit and receiving a second negative voltage externally in the inspection of said semiconductor device and the normal operation of said semiconductor device;

a second protection circuit protecting said internal circuit from static electricity generated at said second input terminal,

said second protection circuit including

a plurality of third diode elements connected in series between the line of said reference potential and said second input terminal and conducting in response to a voltage of said second input terminal going lower than a third negative voltage lower than said second negative voltage, and

a fourth diode element connected between said second input terminal and the line of said reference potential and conducting in response to the voltage of said second input terminal exceeding a third positive voltage;

a third input terminal connected to said internal circuit and receiving externally a voltage of at most a fourth positive voltage and at least a fourth negative voltage in the

inspection of said semiconductor device and the normal operation of said semiconductor device; and

a third protection circuit protecting said internal circuit from static electricity generated at said third input terminal,

said third protection circuit including

a plurality of fifth diode elements connected in series between said third input terminal and the line of said reference potential and conducting in response to the voltage of said first input terminal exceeding a fifth positive voltage higher than said fourth positive voltage, and

a plurality of sixth diode elements connected in series between the line of said reference potential and said third input terminal and conducting in response to a voltage of said third input terminal going lower than a fifth negative voltage lower than said fourth negative voltage.

7. (New) The semiconductor device according to claim 1, wherein

said semiconductor device is formed on one substrate, and

a portion of the substrate having said first protection circuit formed thereon is isolated from a portion of the substrate having said first input terminal and said internal circuit formed thereon after the inspection of said semiconductor device.

8. (New) The semiconductor device according to claim 7, wherein

said semiconductor device forms a portion of a liquid crystal display device, and

said internal circuit includes a thin film transistor array, a scan line drive circuit and a data line drive circuit.